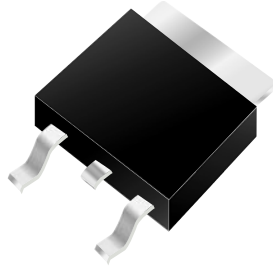


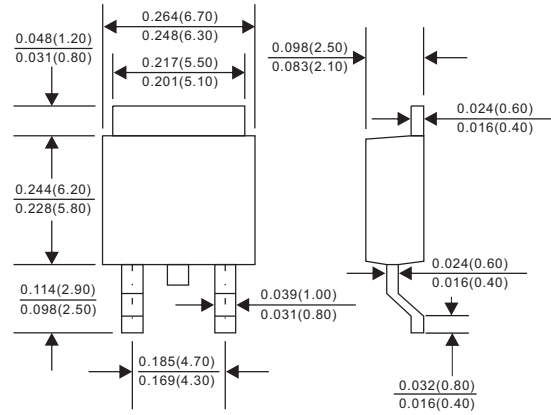
# PKFM820Y-D thru PKFM8100Y-D

## SCHOTTKY BARRIER RECTIFIER

### 8.0A Surface Mount Schottky Barrier Rectifiers - 20V-100V



### DKPAK



Dimensions in inches and (millimeters)

### FEATURES

- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guardring for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228
- Suffix "-H" indicates Halogen-free part, ex. PKFM820Y-D-H.

### MECHANICAL DATA

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, TO-252 / DPAK
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Mounting Position : Any
- Weight : Approximated 0.34 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	$I_o$			8.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$			150	A
Reverse current	$V_R = V_{RRM}$ $T_J = 25^\circ\text{C}$	$I_R$			0.5	mA
	$V_R = V_{RRM}$ $T_J = 100^\circ\text{C}$				20	
Storage temperature		$T_{STG}$	-65		+175	$^\circ\text{C}$

SYMBOLS	$V_{RRM}^{*1}$ (V)	$V_{RMS}^{*2}$ (V)	$V_R^{*3}$ (V)	$V_F^{*4}$ (V)	Operating temperature $T_J$ , ( $^\circ\text{C}$ )
PKFM820Y-D	20	14	20	0.55	-55 to +125
PKFM840Y-D	40	28	40		
PKFM850Y-D	50	35	50	0.70	-55 to +150
PKFM860Y-D	60	42	60		
PKFM880Y-D	80	56	80		
PKFM8100Y-D	100	70	100	0.85	

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage@ $I_F = 8.0\text{A}$

# PKFM820Y-D thru PKFM8100Y-D

## SCHOTTKY BARRIER RECTIFIER

### Rating and characteristic curves (PKFM820Y-D THRU PKFM8100Y-D)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

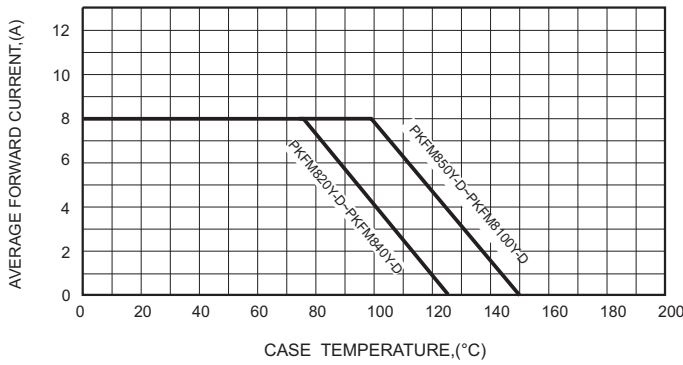


FIG.2-TYPICAL FORWARD CHARACTERISTICS

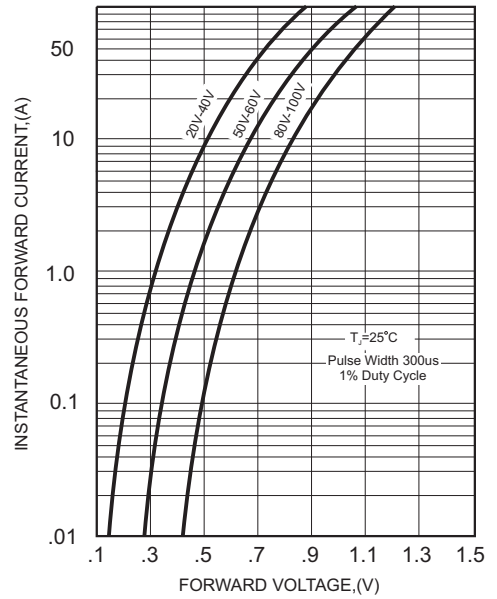


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

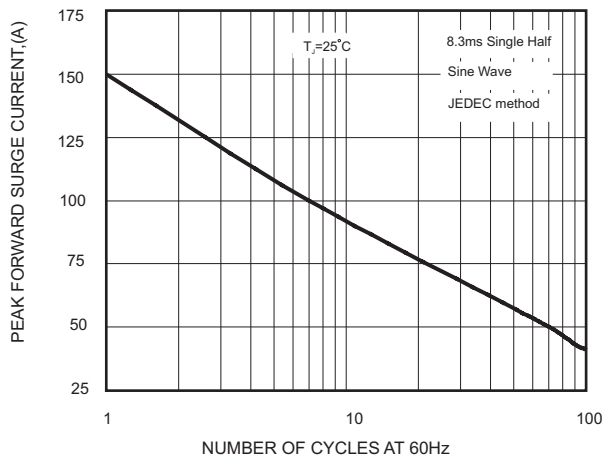
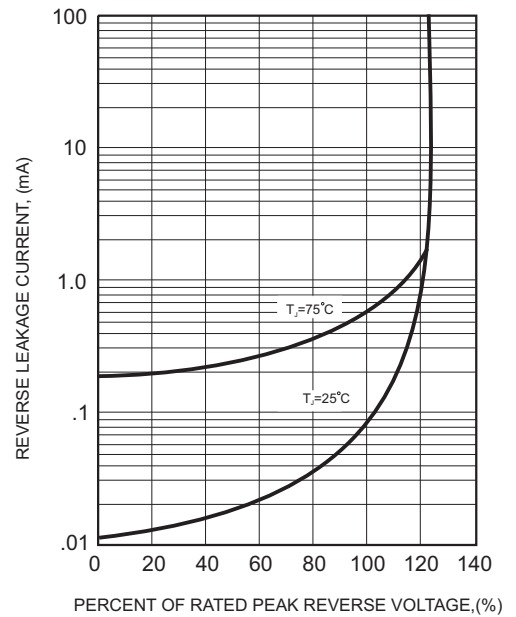


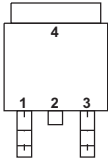
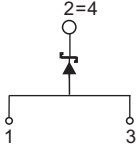
FIG.4 - TYPICAL REVERSE CHARACTERISTICS



# PKFM820Y-D thru PKFM8100Y-D

## SCHOTTKY BARRIER RECTIFIER

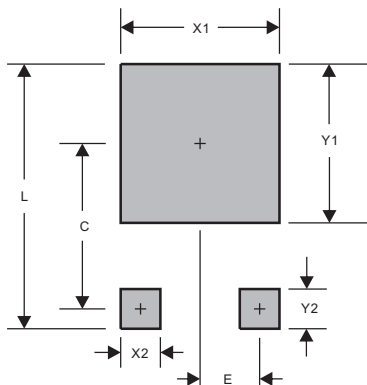
### Pinning information

Simplified outline	Symbol
	

### Marking

Type number	Marking code
PKFM820Y-D	SK820Y
PKFM840Y-D	SK840Y
PKFM850Y-D	SK850Y
PKFM860Y-D	SK860Y
PKFM880Y-D	SK880Y
PKFM8100Y-D	SK8100Y

### Suggested solder pad layout



PACKAGE	DPAK
C	0.272(6.90)
E	0.091(2.30)
L	0.457(11.60)
X1	0.276(7.00)
X2	0.059(1.50)
Y1	0.276(7.00)
Y2	0.098(2.50)

Dimensions in inches and (millimeters)